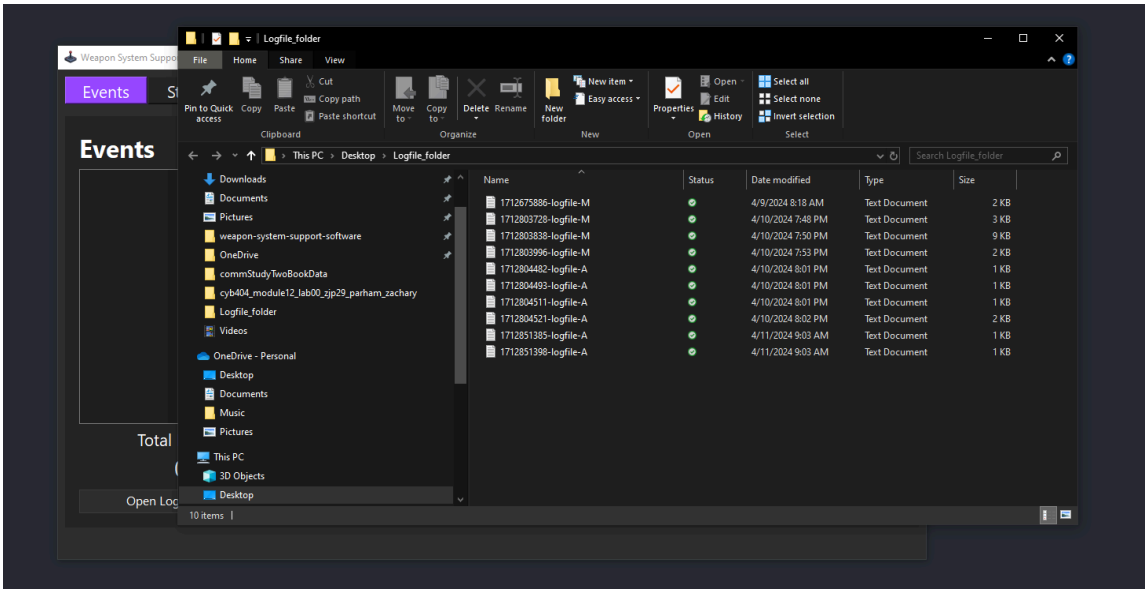
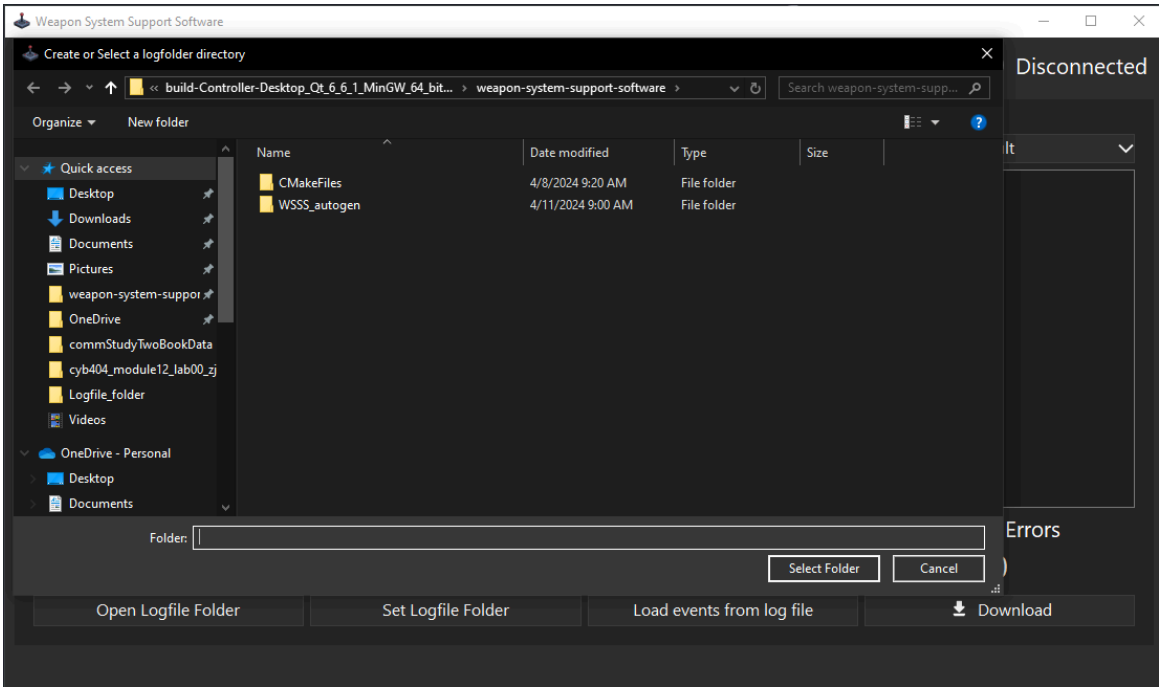
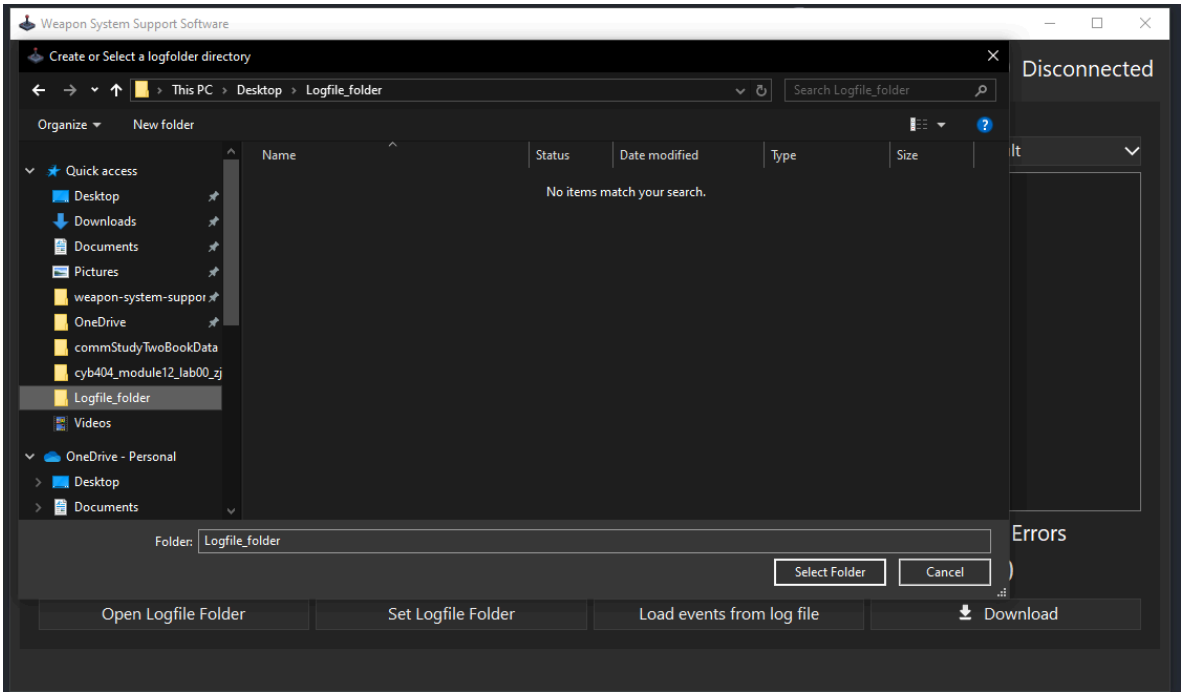
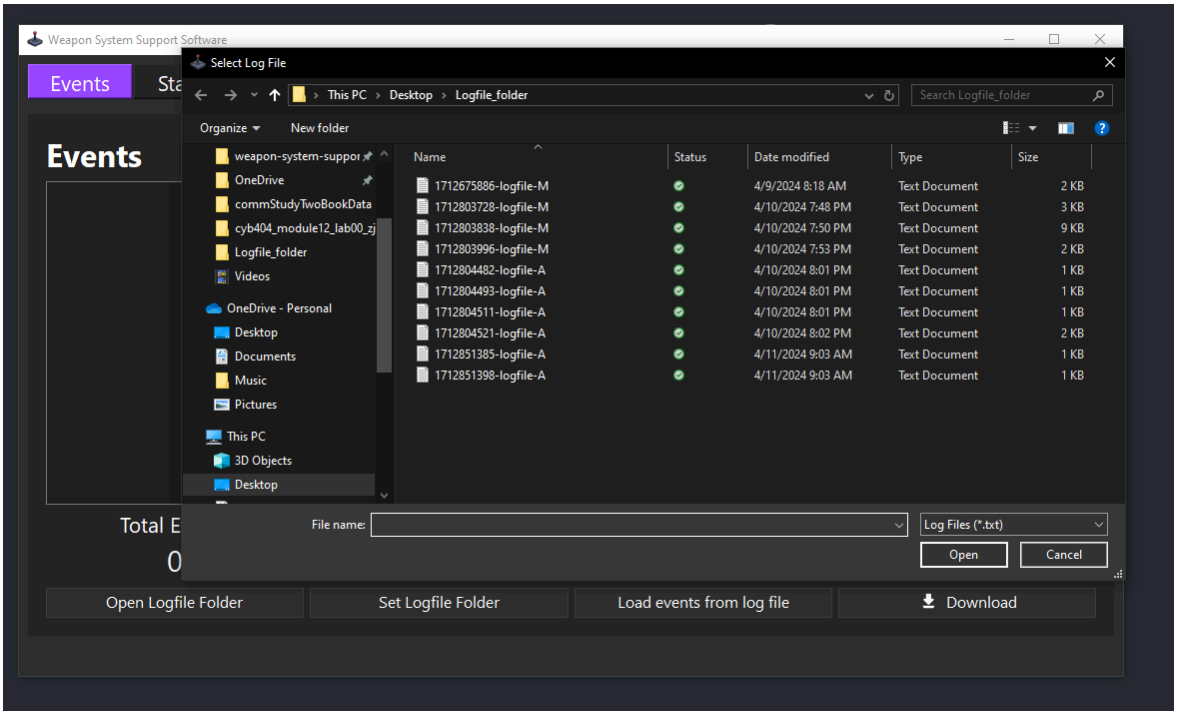
# Events Page

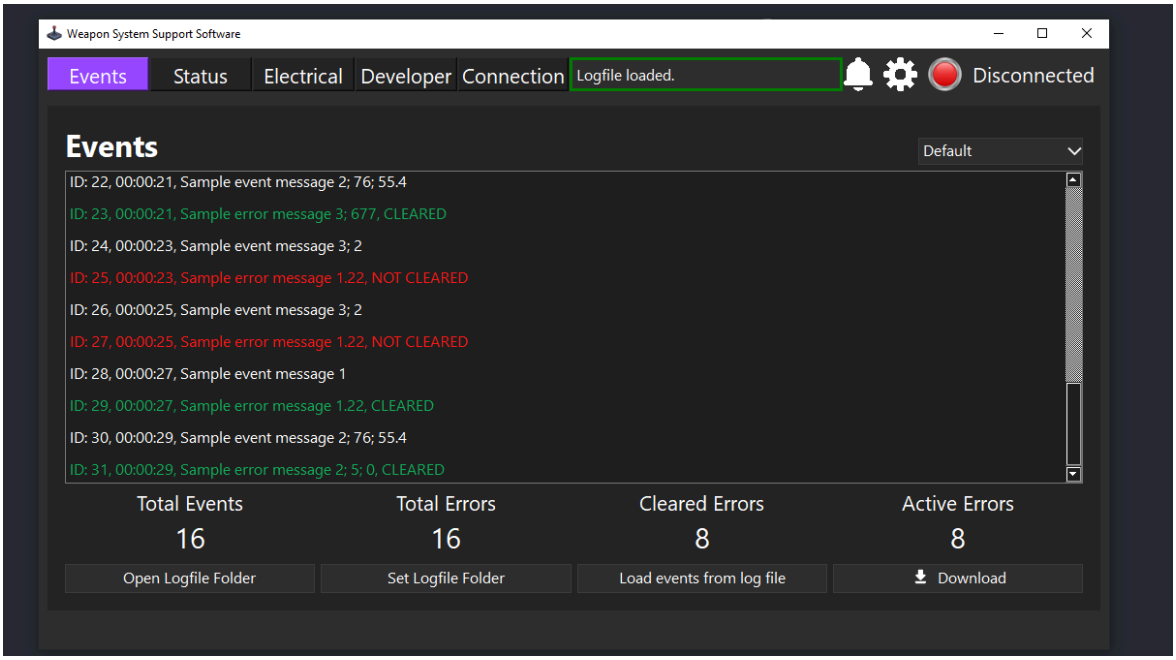
Possible buttons clicked:

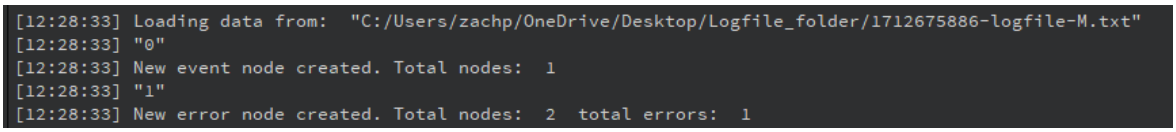
- Open logfile folder
  - 
  - `[12:26:42] log file location opening:  "C:/Users/zachp/OneDrive/Desktop/Logfile_folder/"`
- Set logfile folder
  - 

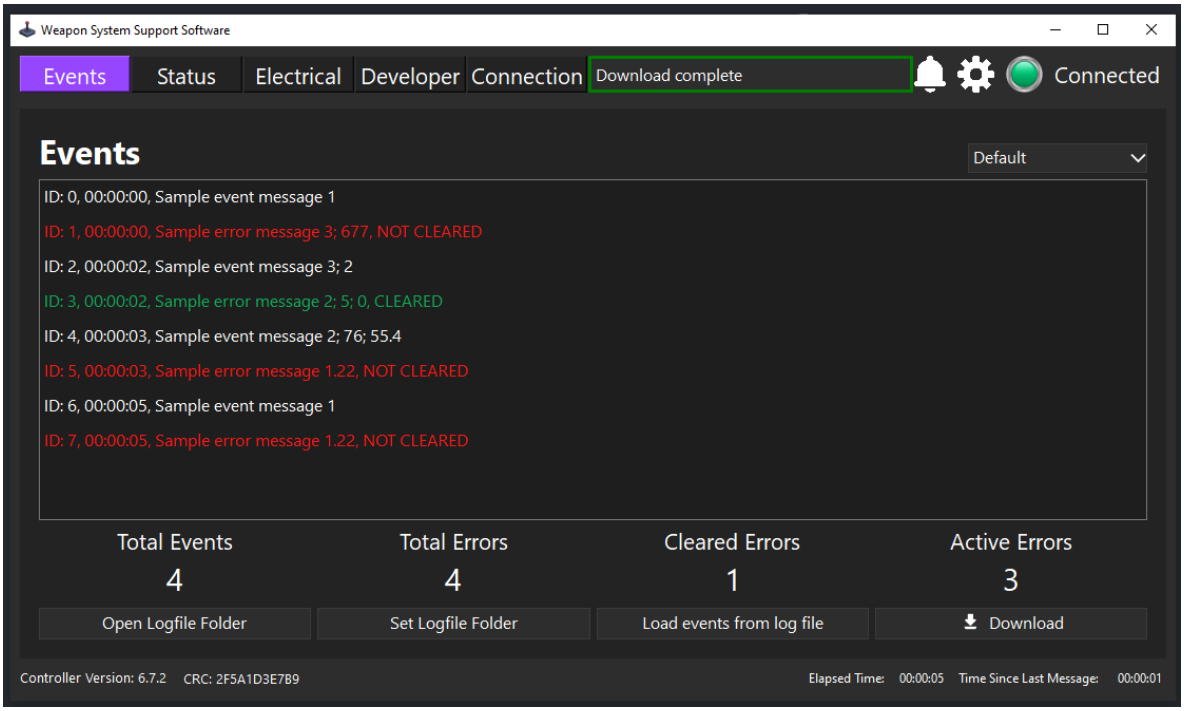
- 

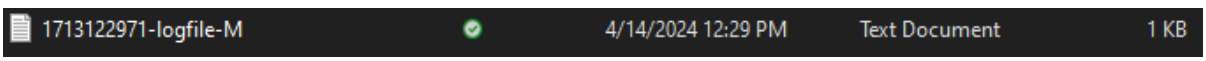
- 


- load events from log file
  - 

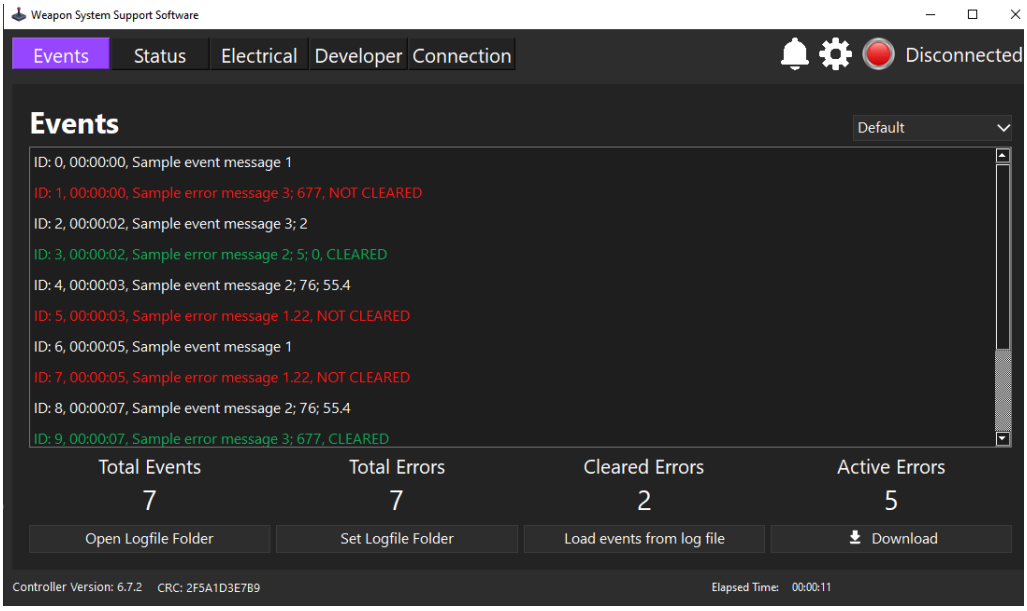
- 

- 

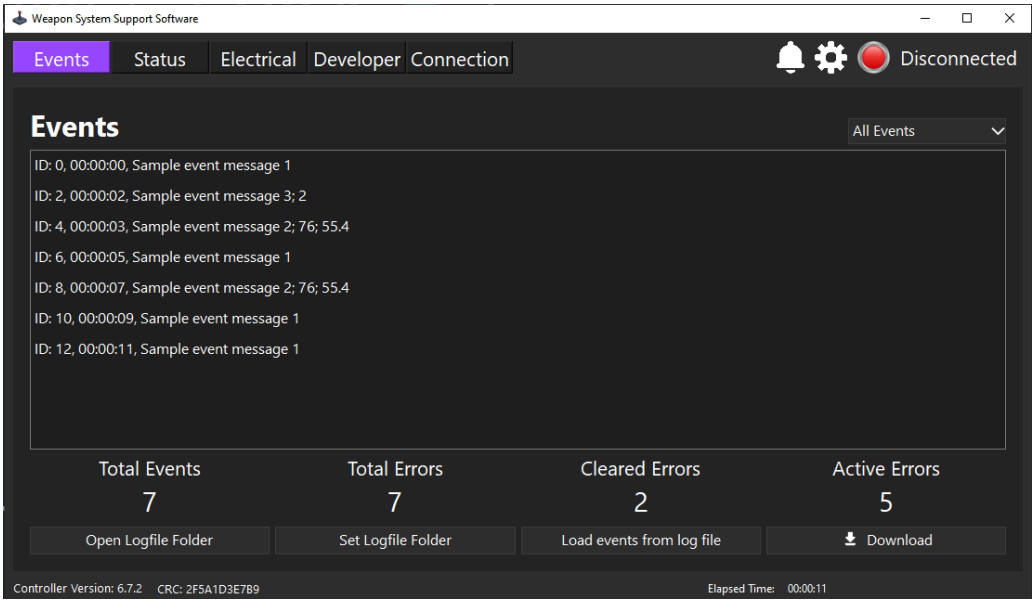

- Download
  - 

  - 

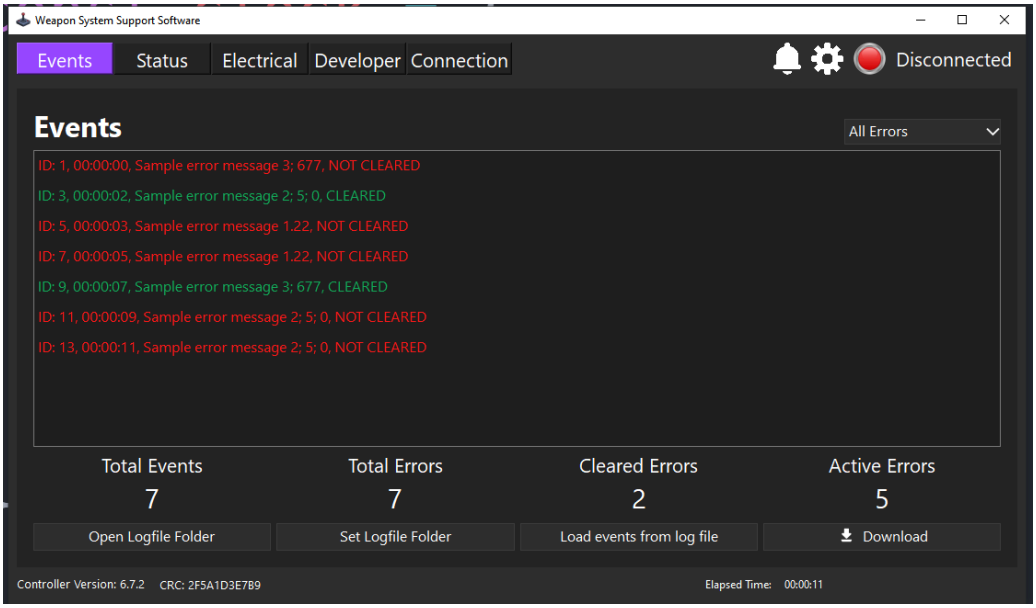

- Filtering
  - Default



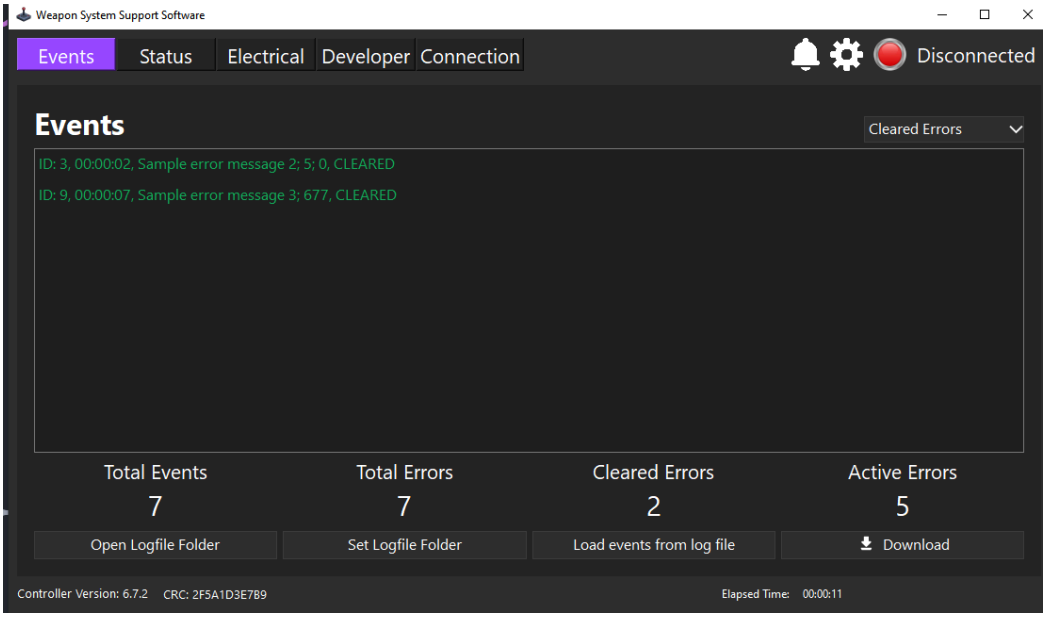

- All events



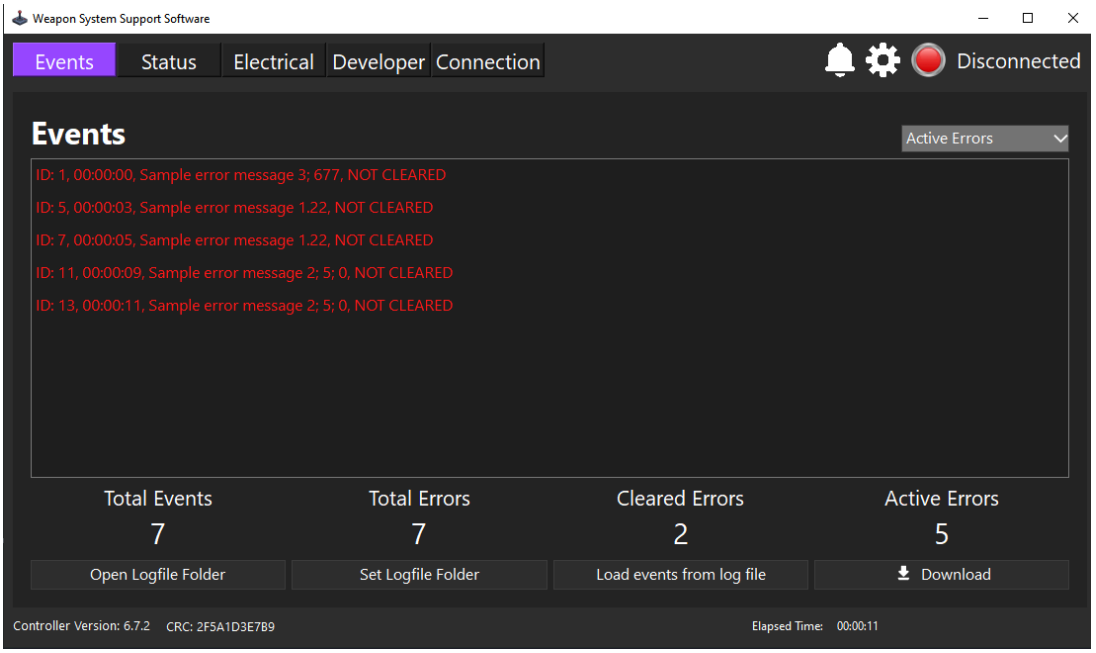

- All errors




- Cleared errors



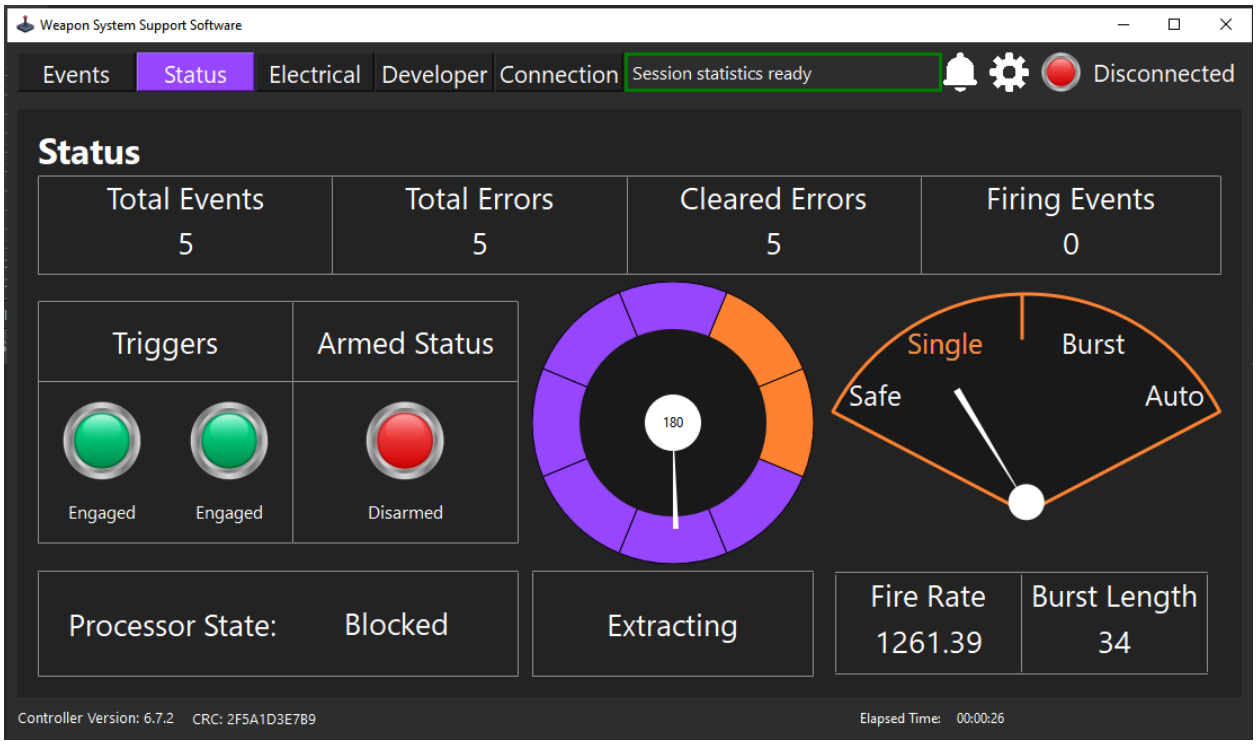

- Active errors




# Status Page

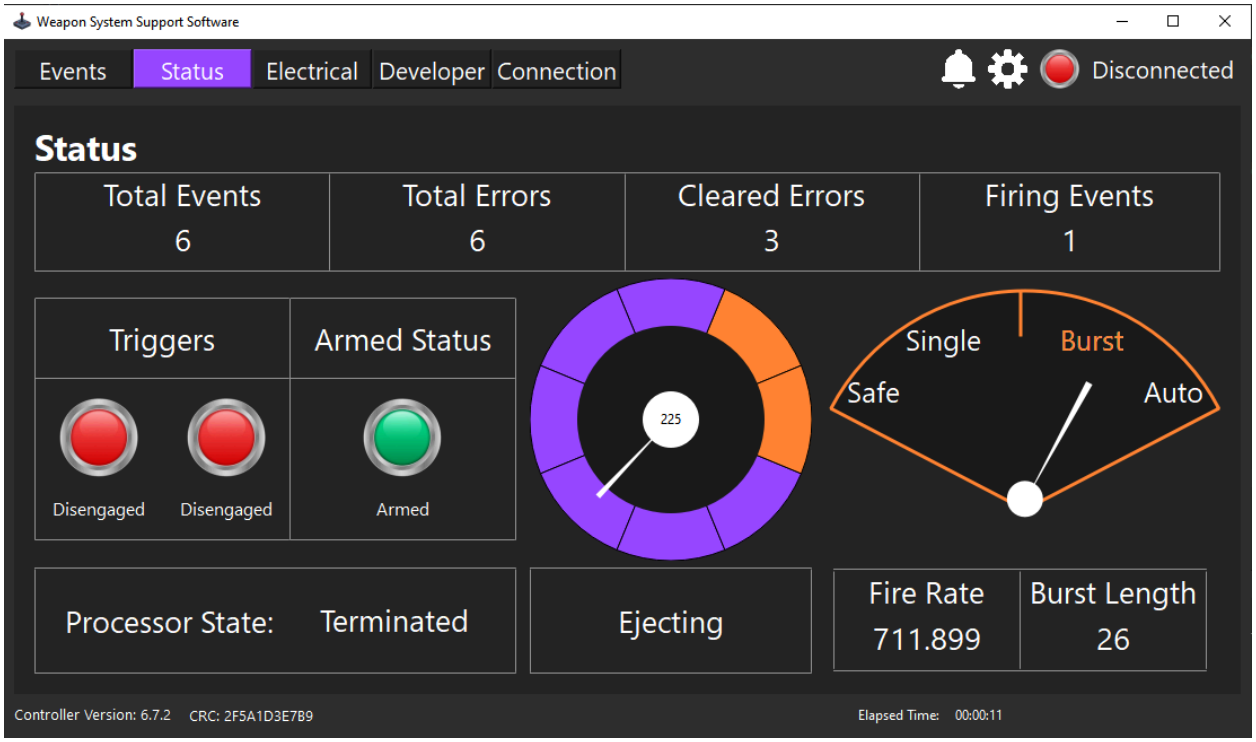
There are no inputs being taken in from the status page. The following tests will consist of value updates. The status page consists of the following variables and values:

- **bool armed**; -> disarmed = 0, armed = 1
- **TriggerStatus trigger1**; -> disengaged = 1, engaged = 0
- **TriggerStatus trigger2**; -> disengaged = 1, engaged = 0
- **ControllerState controllerState**; -> RUNNING=0, BLOCKED=1, TERMINATED=2, SUSPENDED=3
- **FiringMode firingMode**; - SAFE=305, SINGLE=330, BURST=30, FULL_AUTO=55
- **FeedPosition feedPosition**; - CHAMBERING=0, LOCKING=45, FIRING=90, UNLOCKING=135, EXTRACTING=180, EJECTING=225, COCKING=270, FEEDING=315
- **int totalFiringEvents**;
- **int burstLength**;
- **double firingRate**;




```
[13:22:41] message:  "5,0,1,1,1,330,180,0,34,1261.39,\n"
[13:22:41] Message id: status update
```

5 - Status message signifier
0 - Armed Status
1 - Trigger1 engaged bool
1 - Trigger2 engaged bool
1 - controller state
330 - firing mode
180 - feed position
0 - total firing events
34 - burst length
1261.39 - firing rate



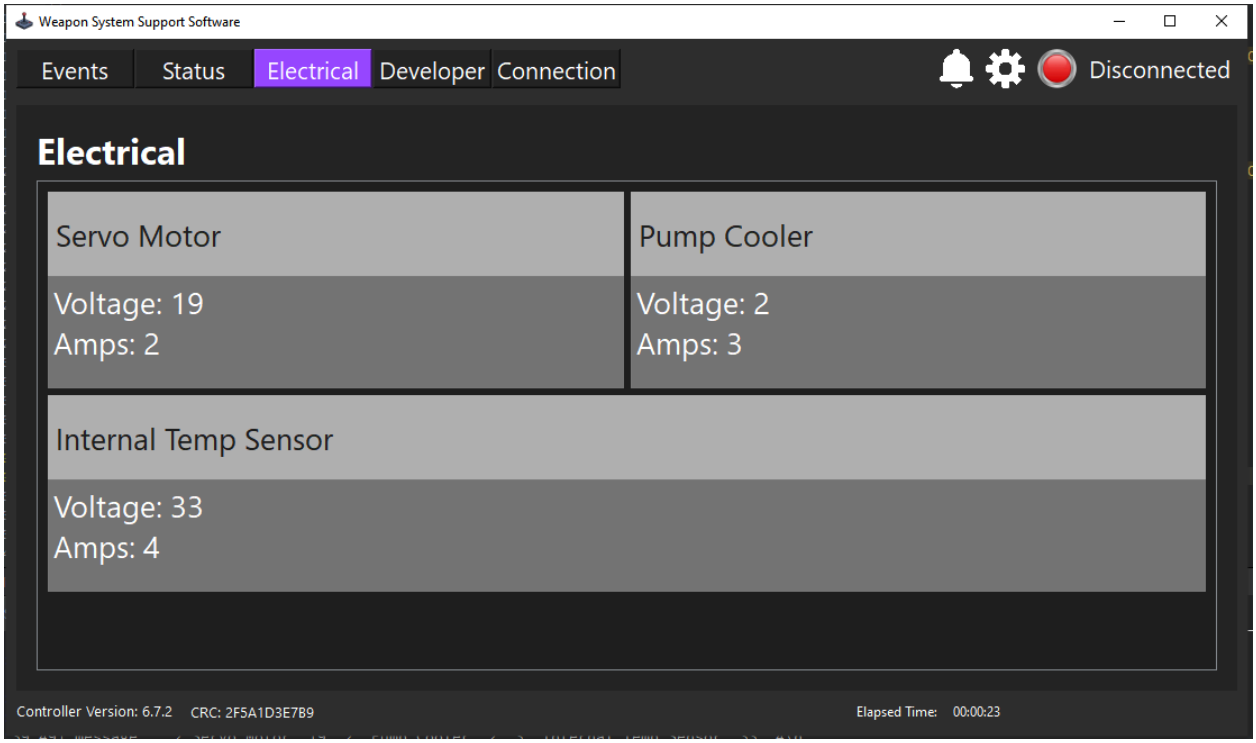

```
[13:34:52] message:  "5,1,0,0,2,30,225,1,26,711.899,\n"
[13:34:52] Message sent through  "COM9"  :  "4,11,00:00:10,Sample error message 3; 677,1,\n"

[13:34:52] Message id: status update
```

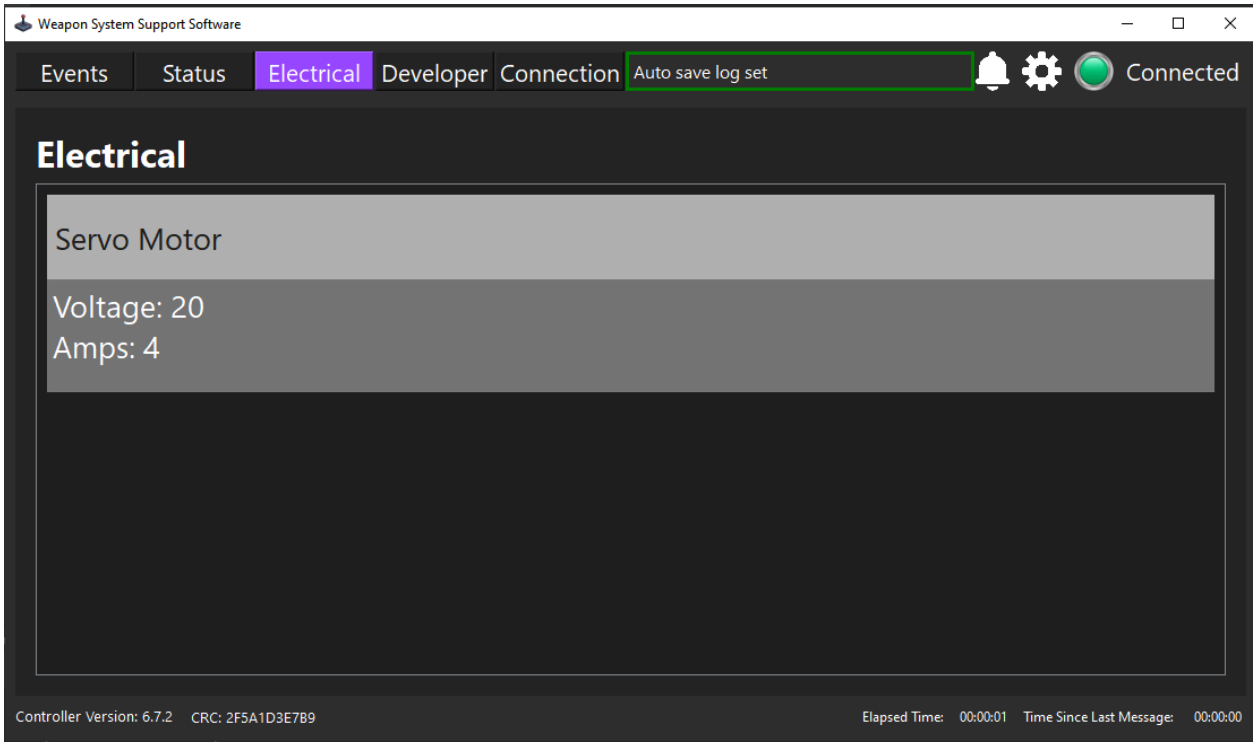
5 - Status message signifier
1 - armed status
0 - trigger 1 status
0 - trigger 2 status
2 - processor state
30 - firing mode graphic - SAFE=305, SINGLE=330, BURST=30, FULL_AUTO=55
225 - feed position - CHAMBERING=0, LOCKING=45, FIRING=90, UNLOCKING=135, EXTRACTING=180, EJECTING=225, COCKING=270, FEEDING=315
1 - firing events
26 - burst length
711.899 - fire rate

# Electrical Page

Similar to the status page, there will not be user input in the electrical page. We will be looking at the value boxes updating with each electrical message.




2 - electrical message signifier
Servo Motor, 19, 2 - servo motor with voltage of 19 and amps of 2
Pump Cooler, 2, 3 - pump cooler with voltage of 2 and amps of 3
Internal Temp Sensor, 33, 4 - internal temp sensor with voltage 33 and amps 4




```
[13:44:46] message:  "2,Servo Motor, 20, 4\n"
[13:44:46] Message id: electrical
```

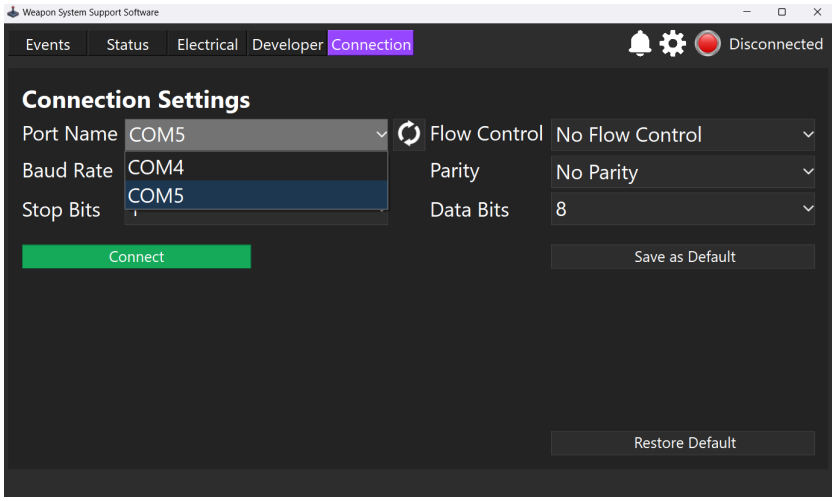
2 - electrical message signifier

Servo Motor, 20, 4 - servo motor with voltage of 20 and amps of 4

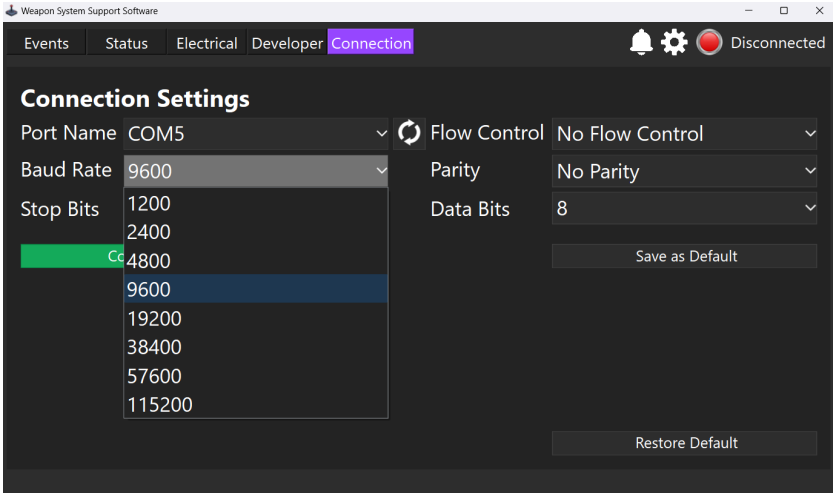
# Connection Page

Possible buttons clicked:

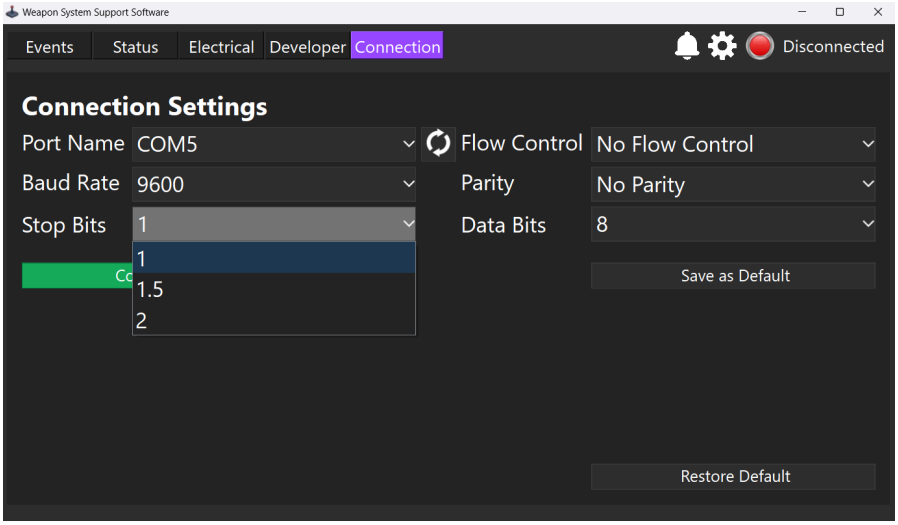
- Port Name dropdown menu



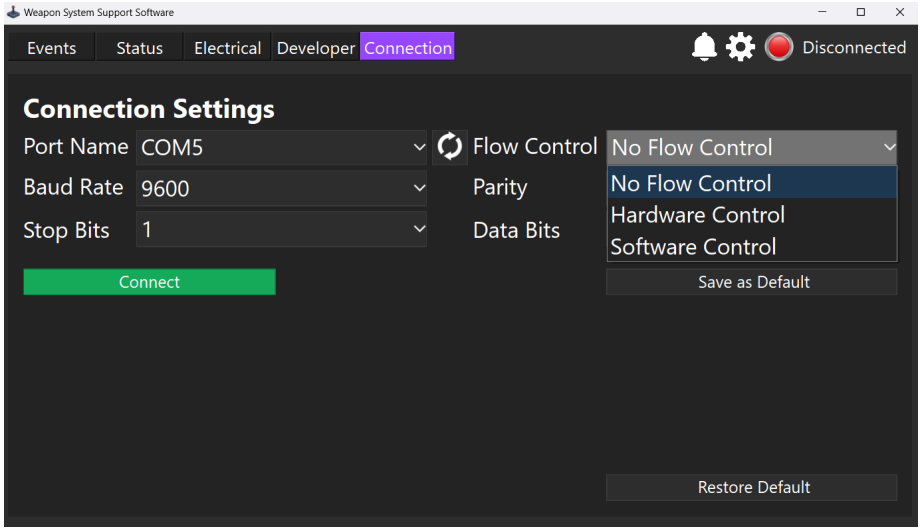

- Baud Rate dropdown menu



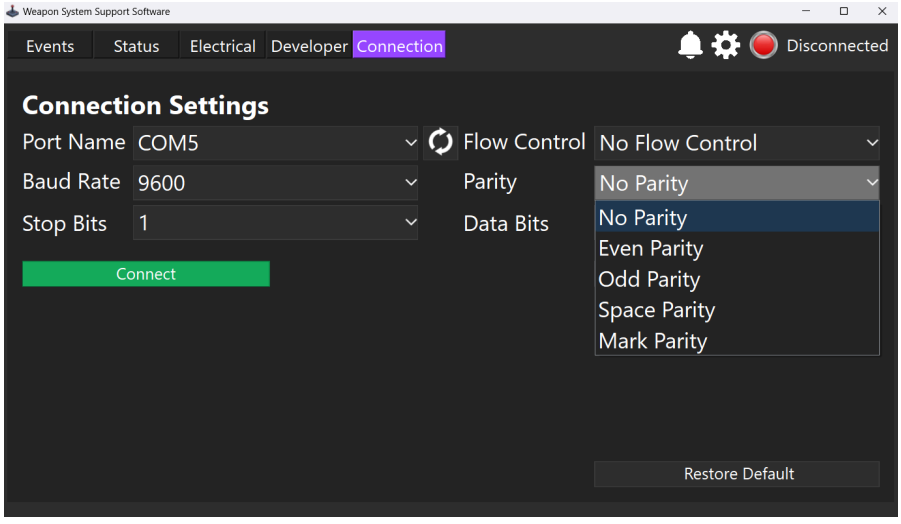
- Stop Bits dropdown menu



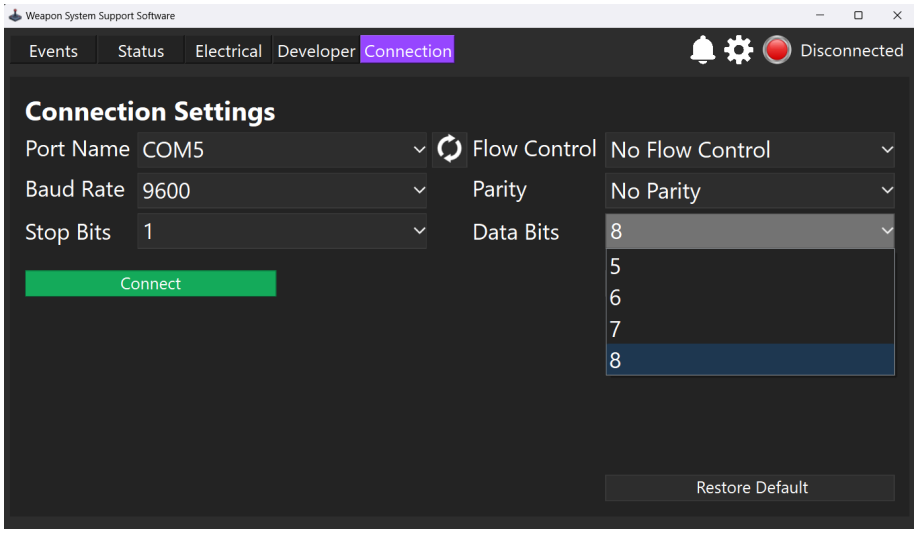

- Flow Control dropdown menu



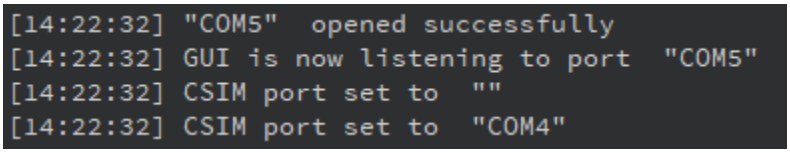

- Parity dropdown menu

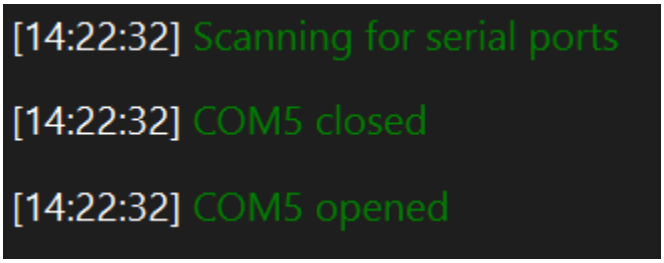


- Data Bits drop down menu

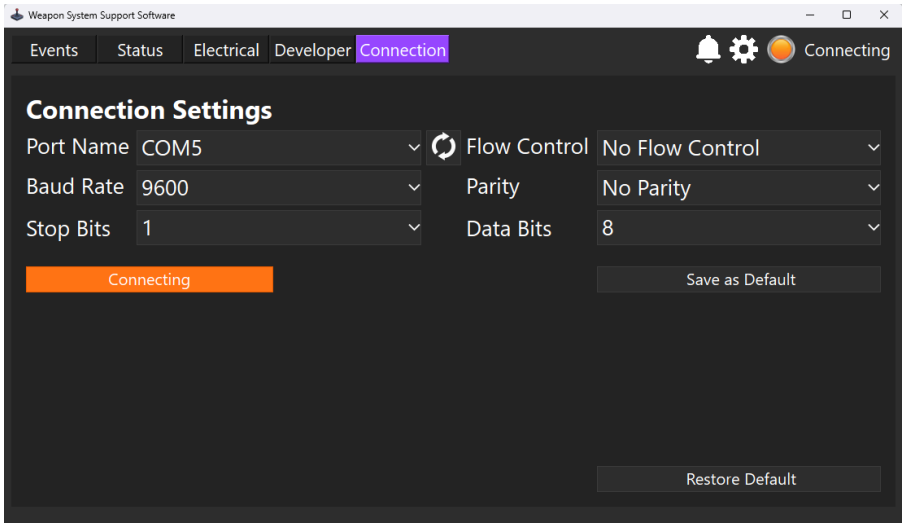


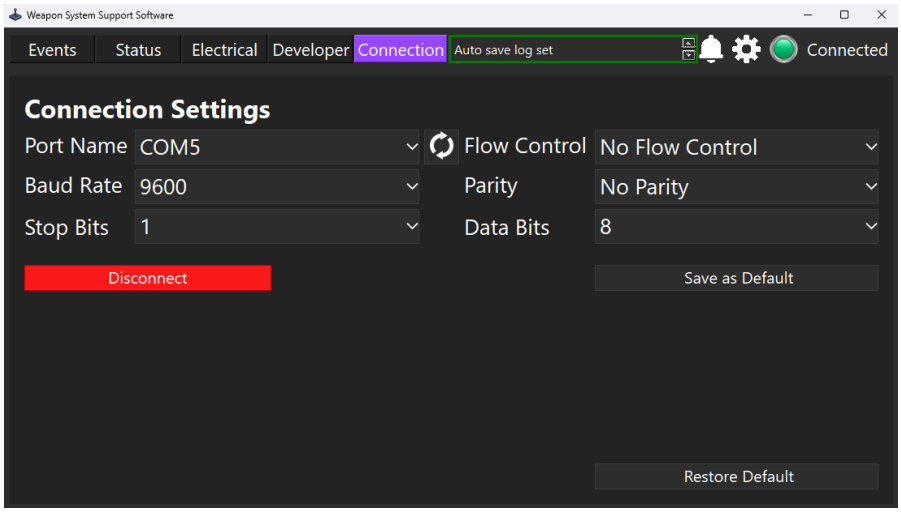

- Refresh Serial Ports



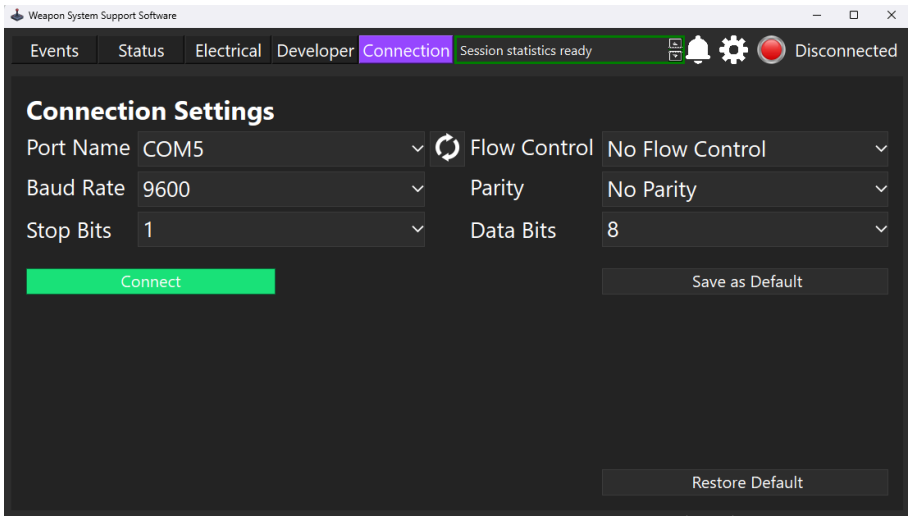




- Connect





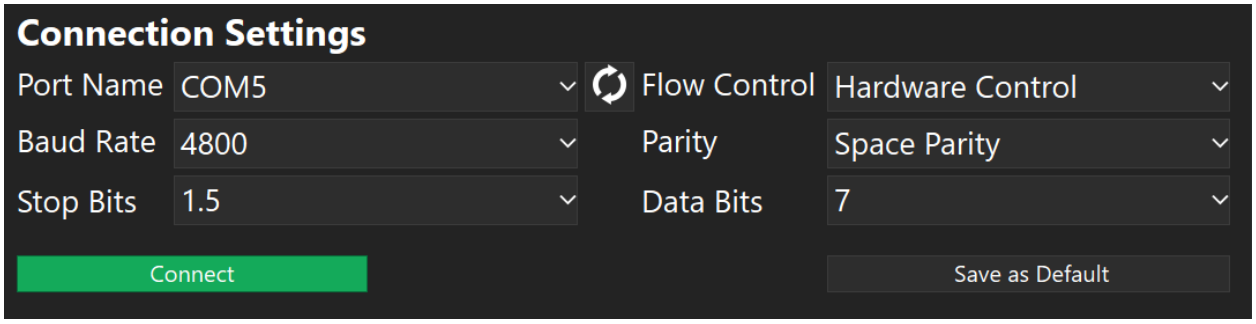

- Disconnect



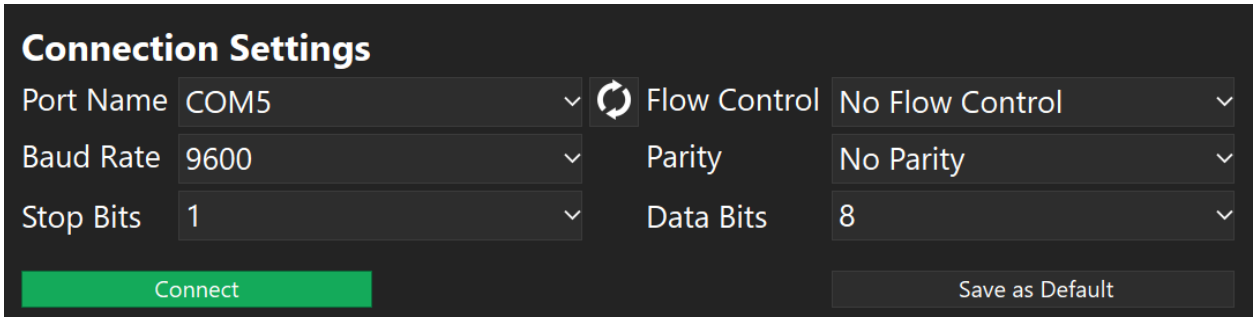

- Save as Default


```
[14:27:04] Connection Settings Saved Cross Session:
[14:27:04] DDM Port:  "COM5"
[14:27:04] CSIM Port:  "COM4"
[14:27:04] baudRate: "4800"
[14:27:04] dataBits: "8"
[14:27:04] parity: "No Parity"
[14:27:04] stopBits: "1"
[14:27:04] flowControl: "No Flow Control"
[14:27:04] logfile location:  "C:/Users/hiimb/OneDrive/Desktop/Team Controller CS486/Whater ver/"
[14:27:04] Colored Event Output:  true
[14:27:04] Auto Save Limit:  5
```

- Restore Default
    - Before:




    - After:




# Usability testing

We had many people test out our program to look for issues and bugs. This was also a great opportunity to get feedback on how we did and any improvements we could make. We had 5 people test out the program and the experience level ranged from knowing a lot about software development to no knowledge at all. The result of this was 4 out of the 5 users we conducted user tests with had no issues with the installation and program features. One case we found a few minor bugs with the software so after talking to the user we fixed the bugs that were found.